

**Abstract:**

*Page 39, in the abstract section, replace with the following new abstract paragraph:*

--- MULTIBAND MIMO-BASED [[3G]] W-CDMA AND UWB COMMUNICATIONS

Abstract of the Disclosure

This invention disclosure presents a system of a multiband MIMO-based [[3G]] W-CDMA and UWB communications for [[a]] wireless and local area fixed wireless communications. The entire system includes a [[3G]] W-CDMA base station, an UWB base station, and  $p$ -user dual-mode W-CDMA and UWB portable stations ~~of 3G W-CDMA and UWB~~. ~~Four~~ OFDM multi-frequency bands are employed for UWB communication, with each of the multi-frequency bands having a ~~512 MHz~~ bandwidth. The ~~QPSK~~ modulation is used for the dual-mode transceivers of 3G W-CDMA and UWB communications. This system allows  $N$  multiuser  $p$ -user to transmit and receive[[r]] a very high-speed multimedia information data based on either 3G W-CDMA [[or]] and UWB communications to access both wireless phones and Internet.